WORLD USABILITY DAY

Theme for Event:
Mobile Communication

November 11, 2010

Kellogg Conference Center
Michigan State University
MR. PIERCE: Okay, moving on to our next speaker. My name is Graham Pierce, a user experience researcher here at UARCK. Quiet please. I’m going to be introducing our next speaker, Chuck Baird. Chuck is director of Agency Support Services in the Michigan Department of Technology Management and Budget. He created and oversees the first and only usability lab within the state government and is also the founder and director of Michigan User Experience team. Earlier this year, Chuck hosted a User Experience Awareness Day for the state of Michigan, which some of you may have attended. Chuck received both his Bachelor’s and Master’s degrees here at Michigan State University, so he is welcome on stage. Today, he’ll be telling us about---

MR. BAIRD: But I don’t have a PhD.

MR. PIERCE: ---the usability process in the state of Michigan.

MR. BAIRD: This is the remote, I assume, right? I’m doing a persona change to a speaker, so I want to make sure I’ve got it right. Well, I’m actually quite happy to be here today to go over what we’re doing at the state of Michigan regarding mobile applications and our user experience team. But, before I do that, we normally have quite a few people from the state here, so would all state
employees that are here today raise their hands? Wow, I’d like you all to know that they’re working on their day off.

As I said, we have attended this event just about from the beginning, and I know a couple of years ago our director was giving a presentation, and he’s usually a very verbose and loud speaking style, which I’ll get into a little later. But, we overheard a couple of people in the audience afterwards and they were --- one person said to the other person, you know, when I saw that was a government presentation I wasn’t horribly interested but that was actually pretty good. And the other person said, yeah, but I didn’t know the government cared about usability. So, I’m here today to clue you into the fact that we do care and we actually care quite a bit.

So, is this your mental model of government services? Has everybody here been basically standing in line to get a driver’s license? Okay. But, over the past ten years basically the Internet has changed just about everything for us. The state of Michigan has made a strategic direction to get as many possible applications and services out of the brick and mortar and onto the Internet where it belongs. That saves us money, saves us time, gives you better customer service, but it also allows us to take better advantage or better use of the limited resources we
have. The number of state employees that work today is just about the lowest it’s been in a long time.

So, in 2001 the office of E-Michigan was created, and E-Michigan is responsible for the michigan.gov portal, and that thing sat looking like this until about 2008, when it got it’s first re-design. Then it got another one in 2009. Then it actually got two in 2010. This is pretty much what you’re going to see today online through a browser. However, naturally just when we get up to speed delivering services through a browser, here comes along mobile devices. Unfortunately, the mobile devices are ubiquitous. That means we all carry our phones and everything with us. How many people here do not have a device that’s capable of accessing the Internet? Oh, my God. There’s actually two or three people here that can’t access Internet over their devices. Somebody will see you after the thing.

So, what we’ve seen in recent reports is the adoption rate of these devices is faster than any technology ever before, and the use of PC’s to access the Internet is actually declining. So, what we need to do in government is take advantage of that fact, and take advantage of the opportunity and start delivering more and more services basically to anyone, anywhere, at any time, and that’s really our strategic goal. But, unfortunately, that means
we have to re-engineer hundreds of applications and services we already have online.

If --- I know there are a lot of people with iPads around here. I’ve seen them. If you were — and don’t do it know because, you know, I’d like you to pay attention, but if you were to go to mobile.mi.gov you would be able to access the existing website. Unfortunately, you would find out that you can’t do everything, right, because it wasn’t designed specifically for the iPad. So, let’s take a quick look inside mi.gov. I’d like you to know it took us three days to squeeze our intern in here to take pictures from the inside out, but, you know, we had to give him a useful job.

So really what mobile.Michigan.gov is basically a WAP and WML enabled service that you can access over you cell phone and other devices. This is what the menu generally looks like. Let me take a look here. This particular shot, it’s not everything that’s on the menu, but you’ve got Michigan Newswire which can provide government and Michigan-based news to you. More importantly, you can get the lottery numbers. Yes, okay. So, just in case you’re out and you’re having a really nice dinner, it’s really expensive, and you go, oh my God, I can’t pay for it, you know, you can check you lottery numbers.
Now, here is an interesting application. We have very few real live applications out there at this point. This allows you to get 24-hour fishing licenses. So, if you’re out at Leo’s Lodge with your buds, you’re looking at stuffed fish on the wall, you go, wow, why don’t we go fishing tomorrow. And, you go, well, you know, it’s happy hour, it’s a little late, and we can’t get our licenses and tomorrow is Saturday. Well, now all you have to do is go there, and unfortunately you do have to pay, but you go there and apply for and get your fishing license, you get a number back, and voila, you’re legal to fish. So, take your phone with you in a floating plastic bag.

Social networking. Governments are finding social networking is very good for them. It is a way of reaching out to people and getting the news that they need right away. For example, MDOT has a Facebook site where they discuss projects and road conditions. More importantly, they also have Twitter, and what they do is they tweet the projects and incidents and road conditions in Michigan so you can get them on your mobile device wherever you are.

This is some of the feedback that we’ve gotten from MDOT’s tweets. At Michigan.gov, tweeting is incredibly useful. Yes, this is exactly how it should be done. I love how you guys are using Twitter to provide a service,
and I am flat-out loving the road construction tweets and notifications from MDOT. Believe me, working for government service, you don’t see a lot of things like that, okay? So, you know, that’s great. And, besides they’re a client of ours, so we feel even better.

Let’s talk a little bit about future apps. MDOT also has a site called MyDrive. Has anybody been there? Oh, okay. It’s Michigan.gov/drive. And, again, if you go there with an iPad you’ll find out you can’t exactly do everything yet. That’s why, again, it’s a future application to get it onto iPad so it functions properly and to get it onto iPhones and other devices as well so that you can get that traffic information exactly where you need it, which, right now, might be before you go home, or when you’re stuck in traffic, but not while you’re driving.

Other future applications that I’ve gotten word of that are coming down the pike are recreation locator, you know, you’re driving aimlessly around on the weekend, you want to go somewhere. You can locate state parks, trails, recreation areas, etcetera. This will be GPS-based so it can take a look at where you are and give you some of the things that are available nearby. Also, mobile application really for DHS caseworkers when they’re out in the field and they have some issues, it provides some information to
them about foster care parents they may need at short notice. Secretary of State branch locator, public sex offender search. I don’t know why on a mobile device you’d be looking for that. OTIS search, offender-tracking system. And more hunting and fishing licenses. So, hey, you know, you could be at Leo’s Lodge going, well, let’s go hunting tomorrow, right, and you could get yourself an online license.

So how do we at the state, who people think traditionally is behind the times, how do we actually make sure that these up-and-coming applications and services are really going to be usable, and that you actually have a good user experience when you’re there. Well, that would be our user experience team, many of whom, by the way, are back there. We’ve had some good presentations today that I think will help us out.

So, it is a strategic goal to move services to the Internet. It’s also a strategic goal for us to create our team as an official statewide cross-agency, shared service, and ultimately a center of excellence.

So, for just a quick – for those who care, and those state employees that are here – actually about 15 years ago I tried to do this. It didn’t work out. So, when the web came along I thought about it again, and then a couple of
people showed up who were assigned to me as quality assurance people and I also got what’s called a configuration management team, and for the programmers in here, you know that those are the people that release programs to the wild. So, all of a sudden, I had a choke point. It’s like, oh, you can’t release any programs unless we say so. So, I talked to Amy Montgomery, who is at the table back there, I said, could you investigate how today we can do usability testing on our applications. So she went out, took a look, did a bunch of research pretty quickly, came back, we picked our software, we established a usability lab, and all of a sudden the release process changed to, oh, by the way, you have to have a usability test. And everybody is saying, a what? What the heck are you talking about? Are you talking about UAT. They said, no, we’re talking something different. So, believe me, at the state and as anywhere, any organization, people have their concerns about, oh, man, this is going to take time, what is the deal, it’s a waste of time, you know, my business partners aren’t going to like this. So, we went through the process. We’ve been doing it since, what is that, 2005. We’ve had no issues, 100% success rate, serious buy-in from the business community, the agencies
that we support, and we’re seeing nothing but growth and support from our executive office all the way to the top.

That support got a little more official in 2007 when I said, oh, enough of this, why are we just doing this at MDOT, why don’t we do it department-wide, or statewide, like I was mentioning. So, wrote a white paper. Amy helped along with that. We presented it all the way up the food chain at the Department of, what was then called Information Technology. And they said, yes, sure, we’d like you to make a center of excellence, start out with a shared services team and broaden that out to a center of excellence statewide.

So, here we are in 2010. We finalized our initial team. We’re actually hiring. Unfortunately, most people in the room probably missed the postings for that. If we can’t find anybody, I want to let any students in here in this area know that we will then be offering students a real job if they graduate from college. So keep your eyes out. In our user experience team the fundamental things that we have been doing, usability testing, heuristic reviews, Section 508 compliance, card sorting, cluster analysis surveys, focus groups. Prototyping, you know what, we haven’t done that yet. I should not have put that on there. We help people with their prototypes. We will
be doing prototyping. We’re dealing with UI and interaction standards for developers, and we are currently developing user-centered design methods to insert into our statewide methodology, which the people from the state would know as SWEET, and SEM.

Card sorting, I know a number of people in here, if you’re in the user-centered design, user experience, have any of you done card sorting? I’ve done it manually. We currently do it with software. We use Web Sort, and we found that it’s handy to send out invitations to people and have them do this. We’re able to reach a much broader audience since the state really serves just about everybody. However, if you’ve done manual card sorting you also know that it takes away the interaction and does not allow you to follow up and ask questions of people. So, we do that. We get some statistics that are handy, and actually we’ve got the tree graph which helps us explain to the client, who normally wants to organize the site differently, it helps us explain, well, this is the mental model of your users, you know, not your department director, not your boss, but your users. So, the whole intent, one of the initial intents of our team was to start introducing objectivity into the development process and the design process. This tool for us has helped quite a
bit. We have had a couple of blunders, such as - where is she - such as maybe doing too big a card sort. We did that, we made that mistake, but it was still interesting nonetheless.

I had hoped to have some pictures of our lab but that didn’t happen. So this is what we show our business folks and basically it just outlines how we normally do our usability testing. The way we’re structured, since we do not currently have projects coming to us where they’ve actually done good user or any user design up front, they’re not coming to us with user requirement specifications, so we have no idea what time and task is. So, we’re really just doing talk out loud usability testing. The tester is in the lab, the observation room has the development team and the stakeholders are all there, and they get to watch in horror as somebody tries to use their work. But that horror always turns to delight right at the end, and they go, oh, that was great, thanks a lot, we’ll fix that in the next release. And then, of course, sometimes that never happens. But, we’ve had a great deal of success with this. This is what has really sold it for us. I know we did it backwards compared to what some of the field would say. They would say get executive support and drive it down. We’re a little more
populist about it. We just made them do it and drove it up the food chain. We were able to show people; by the way, you know that system over there, if you would have done this you wouldn’t have to rewrite it. And, believe me, we’re very sensitive about cost.

This is just an example. Normally, we do a video but you can see poor Wendy down here wearing her black sunglasses. I didn’t think that we actually had a public release for her, so we’re not going to play the video. But this was very interesting because everybody that went through this test, this was a design that we didn’t like, but again, it was driven by the client. You know how clients will tell you, this is how I want to do it, right? So we did it that way, fully knowing how the test would turn out. Funny how that works. And, it turned out the way we thought because everybody that we tested with said, what is this? I can’t understand the wording, you know, what are these politicians trying to pull over on me, yade-yade-ada, okay. So, we were able to redesign that, make it make more sense to the actual people that were using it. It didn’t look anything like that when we were done, I don’t think.

So, real quickly, I know we’re running short on time. This is fundamentally the SWEET serv - or system
development life cycle, pretty similar to any other life cycle. Just to let you know how we are inserting this into our development cycle, we’re trying to get with people at the beginning, get us inserted into the project so they budget correctly for user experience work, otherwise they give you a song and dance we can’t afford it. This is where analysis, you know, that’s where we’re talking about focus group surveys, task analysis, user profiles and personas, followed by, if we do it, card sorting, followed by prototyping, and then the usability testing of that prototype, and then the usability testing towards the end of the process as they get all their work flows completed. And, something important is we’re working with people with existing systems and new systems. If they have a help desk, we want them to start capturing metrics so we can understand, you know, you’ve got a usability problem, okay. So, we, as we set up the team, are doing what is called federated model. We will not have a huge staff, but we will work with people in other agencies that are assigned to perform certain user experience tasks.

So, we’re creating a new career path. We are separating designers from programmers, thank God. Can I get an applause? We are creating a design career path at the state, and we’ve gotten support all the way to the top,
we’ve gotten support from Human Resources. We have a lot of work to do to make this more formalized, but fundamentally we’re looking at user analysts, interaction designers. We’re trying to convince them to use that word because, you know, it’s not just a user interface anymore, usability testers for design facilitation, moderation, and user experience specialist, kind of a general catch-all, you know, we don’t know what Joe does sort of position description. Education and outreach is also part of what we do. This was mentioned, I think, in the intro. Michigan UPA worked with us. We co-hosted this event for all people in our department who could get there, where we went over a lot of this stuff. We went over the methods for user-centered design, and what we’re up to. TechSmith and MSU were participants and sponsors to that as well, as well as Accenture, and Foresee Results. It was a great day. Unfortunately, we could have had more people there but they couldn’t make it, but we had, I think, what 160 people or so, which is not bad.

I think I’ve got the time, right? If we had more time I’d play like huge focus group with you to see what you think would be really some good mobility apps from the state, things that would really help you out. However, we’ve made it easy for you to contact us. It’s
usability@michigan.gov. If it’s not a question directly to
us we will route it and try to help get it to an area that
can answer it or find the answer for you. We’re really
interested in making this work. The state, as you saw, is
just now beginning to work on mobile applications. They’ve
got one coming up. We’re going to be working with them and
trying to work out a good way to do usability testing on
that. So it will be a really interesting experience. I
think you’re going to be seeing a lot of things coming up
that are going to be worthwhile.

Any questions? I know that was kind of quick.

MEMBER OF THE AUDIENCE: (Not audible enough to
transcribe.)

MR. BAIRD: Well, I wish we had designed the
templates. You’re probably talking about where
michigan.gov has done a redesign. They have new templates
and the agencies are not moving on those. It is November.
We had an election. And I’ll tell you, you know, if you’re
at the state and everything blanks out when you have an
administration change. It’s like getting a new CEO in a
company, and you’re trying to figure out where things are
going to go. We’re expecting that there will be a lot of
changes happening at the portal and in the agencies and I
think a lot of people are waiting at this point. Some
people are trying to do redesigns. We’re trying to work with them on that, you know, if there are existing sites, and the portal now is also changing software over to IBM software. So, there’s actually a lot going on. I think a lot of people are kind of waiting to see, well, you know, what is going to happen with the new administration because, believe me, eMichigan is at the governor’s beck and call. So eMichigan will do what the governor’s office wants them to do, and everything else kind of, you know, falls out of that. Now, I’ve been talking to the director of eMichigan, and we’re looking at sharing some responsibilities, and they want to bring us in with regards to design, and I see that as him pushing his pain points off on us. It’s like, oh, everybody doesn’t want to change their website, so, here, you know, you do that. But, actually that’s good, and there will be a lot of work to do, but that’s all I can say. I don’t have contacts with all those agencies.

MEMBER OF THE AUDIENCE: (Not audible enough to transcribe).

MR. BAIRD: The one metric we have right now is that generally when they do the usability test in most medium-sized projects that they burn roughly 40 hours of our time in terms of doing some prep work, executing the test, and
then doing some review and requirement sessions afterwards. That, of course, can change depending on how much we meet with people in advance and, of course, the team or the business area has to do work as well. I think at this point they understand the return on investment, whether they know what it is in numbers or not, because, you know, we all know that it’s difficult, until you gather some metrics, to really show that, oh, by the way, we saved five million dollars. But, they can take a look at something and say, you know, if we don’t have to rewrite this three million dollar system, how much are we saving. Plus, you know, everybody likes to call and complain, so they want to see those calls go down, and one of the things that we’re constantly working with them on re-releases or new releases, they are seeing it go down, and that’s very positive. In terms of the other user center design methods that we haven’t been doing, which would be the requirements analysis and prototyping and stuff, we have to gather some metrics on that and see how long it’s going to take. But, in many cases, it just replaces things that we currently do today. All right, thank you. It’s a nice crowd this time.

MR. ELLEDGE: Thank you, Chuck, for giving that update to us about what the state is doing for mobile devices and also services in general on the web. I know it’s been
really interesting. I’ve been here for four-and-a-half years, and we’ve watched this all take place and participated at different times. It’s exciting to see the state of Michigan moving to much more of an open and customer-centered approach.